



[4910-13-P]

**DEPARTMENT OF TRANSPORTATION**

**Federal Aviation Administration**

**14 CFR Part 39**

**[Docket No. FAA-2018-0104; Product Identifier 2017-CE-036-AD;]**

**RIN 2120-AA64**

**Airworthiness Directives; Gulfstream Aerospace Corporation Airplanes**

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Notice of proposed rulemaking (NPRM).

**SUMMARY:** We propose to supersede Airworthiness Directive (AD) 2015-24-06, which applies to certain Gulfstream Aerospace Corporation Model GVI airplanes. AD 2015-24-06 requires repetitive breakaway torque checks and torquing of the main landing gear (MLG) brake inlet self-sealing couplings and inserting a dispatch and takeoff limitation to the Limitations section of the airplane flight manual. Since we issued AD 2015-24-06, a modification of the MLG and brake assembly has been developed that when incorporated would terminate the need for the repetitive actions of AD 2015-24-06. This proposed AD would require modifying the MLG and brake assembly. We are proposing this AD to address the unsafe condition on these products.

**DATES:** We must receive comments on this proposed AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

- Federal eRulemaking Portal: Go to <http://www.regulations.gov>. Follow the instructions for submitting comments.
- Fax: 202-493-2251.

- Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

- Hand Delivery: Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this NPRM, contact Gulfstream Aerospace Corporation, P.O. Box 2206, Savannah, Georgia 31404-2206; telephone: (912) 965-3000; fax: (912) 965-3520; email: [pubs@gulfstream.com](mailto:pubs@gulfstream.com); Internet: [www.gulfstream.com](http://www.gulfstream.com). You may view this service information at the FAA, Policy and Innovation Division, 901 Locust, Kansas City, Missouri 64106. For information on the availability of this material at the FAA, call (816) 329-4148.

#### **Examining the AD Docket**

You may examine the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2018-0104; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this NPRM, the regulatory evaluation, any comments received, and other information. The street address for Docket Operations (phone: 800-647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

**FOR FURTHER INFORMATION CONTACT:** Gideon Jose, Aerospace Engineer, Atlanta ACO Branch, FAA, 1701 Columbia Avenue, College Park, Georgia 30337; phone: 404-474-5569; fax: 404-474-5606; email: [gideon.jose@faa.gov](mailto:gideon.jose@faa.gov).

## **SUPPLEMENTARY INFORMATION:**

### **Comments Invited**

We invite you to send any written relevant data, views, or arguments about this proposed AD. Send your comments to an address listed under the ADDRESSES section. Include “Docket No. FAA-2018-0104; Product Identifier 2017-CE-036-AD” at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this NPRM. We will consider all comments received by the closing date and may amend this NPRM because of those comments.

We will post all comments we receive, without change, to <http://www.regulations.gov>, including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive about this proposed AD.

### **Discussion**

We issued AD 2015-24-06, Amendment 39-18338 (80 FR 75788, December 4, 2015) (“AD 2015-24-06”), for certain Gulfstream Aerospace Corporation (Gulfstream) Model GVI airplanes. AD 2015-24-06 requires repetitive breakaway torque checks and torqueing of the MLG brake inlet self-sealing couplings. AD 2015-24-06 also requires inserting a dispatch and takeoff limitation to the Limitations section of the airplane flight manual to include procedures to follow if certain display indications occur. AD 2015-24-06 resulted from reports of the self-sealing couplings on the MLG brake inlet fitting backing out of the fully seated position. This unsafe condition could lead to loss of hydraulic pressure to the affected brake. We issued AD 2015-24-06 to detect and correct inadequate torque on the self-sealing couplings and prevent loss of braking capability on one or multiple brakes, which could lead to runway overrun or asymmetrical braking that could result in lateral runway excursion.

### **Actions Since AD 2015-24-06 Was Issued**

Since we issued AD 2015-24-06, a modification for the MLG and brake assembly has been developed that eliminates the self-sealing coupling and uses a permanent hose design. This modification when incorporated would terminate the need for the repetitive breakaway torque checks and torquing of the brake inlet self-sealing couplings.

### **Related Service Information under 1 CFR part 51**

We reviewed Gulfstream G650 Customer Bulletin Number 155B, dated July 26, 2017; and Gulfstream G650ER Customer Bulletin Number 155B, dated July 26, 2017. For the applicable model designations, this service information describes procedures to modify the MLG and brake assemblies. This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

### **FAA's Determination**

We are proposing this AD because we evaluated all the relevant information and determined the unsafe condition described previously is likely to exist or develop in other products of the same type design.

### **Proposed AD Requirements**

This proposed AD would retain none of the requirements of AD 2015-24-06. This proposed AD would require modifying the MLG with new tube assemblies without self-sealing couplings and add lock wire. This proposed AD would also require inspecting and modifying the brake assembly.

### **Differences Between this Proposed AD and the Service Information**

Although Gulfstream G650 Customer Bulletin Number 155B, dated July 26, 2017; and Gulfstream G650ER Customer Bulletin Number 155B, dated July 26, 2017, both contain reporting requirements and return of certain parts to the manufacturer, this proposed AD does not include those requirements.

## Costs of Compliance

We estimate that this proposed AD affects 162 airplanes of U.S. registry.

We estimate the following costs to comply with this proposed AD:

### Estimated costs

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Replacement of brake hose assemblies, inspection of brake assembly attachment bolts, and modification of the brake assembly	65.5 work-hours X \$85 per hour = \$5,567.50	\$14,776	\$20,343.5	\$3,295,647

According to the manufacturer, some of the costs of this proposed AD may be covered under warranty, thereby reducing the cost impact on affected individuals. We do not control warranty coverage for affected individuals. As a result, we have included all costs in our cost estimate.

## Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, Section 106, describes the authority of the FAA Administrator. Subtitle VII, Aviation Programs, describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701, "General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds

necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

This AD is issued in accordance with authority delegated by the Executive Director, Aircraft Certification Service, as authorized by FAA Order 8000.51C. In accordance with that order, issuance of ADs is normally a function of the Compliance and Airworthiness Division, but during this transition period, the Executive Director has delegated the authority to issue ADs applicable to small airplanes, gliders, balloons, airships, domestic business jet transport airplanes, and associated appliances to the Director of the Policy and Innovation Division.

### **Regulatory Findings**

We have determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that the proposed regulation:

- (1) Is not a “significant regulatory action” under Executive Order 12866,
- (2) Is not a “significant rule” under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),
- (3) Will not affect intrastate aviation in Alaska, and
- (4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

## **List of Subjects in 14 CFR Part 39**

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

### **The Proposed Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

### **PART 39 - AIRWORTHINESS DIRECTIVES**

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

#### **§ 39.13 [Amended]**

2. The FAA amends § 39.13 by removing Airworthiness Directive (AD) 2015-24-06, Amendment 39-18338 (80 FR 75788, December 4, 2015), and adding the following new AD:

**Gulfstream Aerospace Corporation:** Docket No. FAA-2018-0104; Product Identifier 2017-CE-36-AD.

#### **(a) Comments Due Date**

The FAA must receive comments on this AD action by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

#### **(b) Affected ADs**

This AD replaces AD 2015-24-06, Amendment 39-18338 (80 FR 75788, December 4, 2015) ("AD 2015-24-06").

#### **(c) Applicability**

This AD applies to Gulfstream Aerospace Corporation Model GVI airplanes, serial numbers 6001 and 6003 through 6163, certificated in any category.

Note 1 to paragraph (c) of this AD: Model GVI airplanes are also referred to by the marketing designations G650 and G650ER.

**(d) Subject**

Joint Aircraft System Component (JASC)/Air Transport Association (ATA) of America Code 32, Landing Gear.

**(e) Unsafe Condition**

AD 2015-24-06 was prompted by reports of the main landing gear (MLG) self-sealing couplings on the MLG brake inlet fitting backing out of the fully seated position. This AD was prompted by the development of modifications that when incorporated would terminate the need for repetitive breakaway torque checks and torquing of the brake inlet self-sealing couplings. We are issuing this AD to prevent loss of braking capability on one or multiple brakes. The unsafe condition, if not addressed, could lead to runway overrun or asymmetrical braking that could result in lateral runway excursion.

**(f) Compliance**

Comply with this AD within the compliance times specified, unless already done.

**(g) Modification of the MLG and MLG Brake Assemblies**

(1) Within 6 months after the effective date of this AD, modify the MLG and brake assemblies following the Accomplishment Instructions in Gulfstream G650 Customer Bulletin Number 155B, dated July 26, 2017; and Gulfstream G650ER Customer Bulletin Number 155B, dated July 26, 2017.

(2) Although Gulfstream G650 Customer Bulletin Number 155B, dated July 26, 2017; and Gulfstream G650ER Customer Bulletin Number 155B, dated July 26, 2017, both contain reporting requirements and return of certain parts to the manufacturer, this proposed AD does not include those requirements.

(3) AD 2015-24-06 required a dispatch and takeoff limitation in the airplane flight manual. Although we did not retain that requirement in this AD, if not already removed, this limitation should be removed after the modification in paragraph (g)(1) of this AD is done.



**(h) Credit for Previous Actions**

If done before the effective date of this AD, this AD allows credit for the actions in paragraph (g) of this AD following Gulfstream G650 Customer Bulletin 155, dated July 29, 2016; and Gulfstream G650ER Customer Bulletin 155, dated July 29, 2016.

**(i) Alternative Methods of Compliance (AMOCs)**

(1) The Manager, Atlanta ACO Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the certification office, send it to the attention of the person identified in paragraph (k)(1) of this AD.

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(3) For service information that contains steps that are labeled as Required for Compliance (RC), the provisions of paragraphs (j)(3)(i) and (ii) of this AD apply.

(i) The steps labeled as RC, including substeps under an RC step and any figures identified in an RC step, must be done to comply with the AD. An AMOC is required for any deviations to RC steps, including substeps and identified figures.

(ii) Steps not labeled as RC may be deviated from using accepted methods in accordance with the operator's maintenance or inspection program without obtaining approval of an AMOC, provided the RC steps, including substeps and identified figures, can still be done as specified, and the airplane can be put back in an airworthy condition.

**(j) Related Information**

(1) For more information about this AD, contact Gideon Jose, Aerospace Engineer, Atlanta ACO Branch, FAA, 1701 Columbia Avenue, College Park, Georgia 30337; phone: 404-474-5569; fax: 404-474-5606; email: [gideon.jose@faa.gov](mailto:gideon.jose@faa.gov).

(2) For service information identified in this AD, contact Gulfstream Aerospace Corporation, P.O. Box 2206, Savannah, Georgia 31404-2206; telephone: (912) 965-3000; fax: (912) 965-3520; email: [pubs@gulfstream.com](mailto:pubs@gulfstream.com); Internet: [www.gulfstream.com](http://www.gulfstream.com). You may view copies of the referenced service information at the FAA, Policy and Innovation Division, 901 Locust, Kansas City, Missouri 64106. For information on the availability of this material at the FAA, call (816) 329-4148.

Issued in Kansas City, Missouri, on February 5, 2018.

Melvin J. Johnson,  
Deputy Director, Policy & Innovation Division,  
Aircraft Certification Service.

[FR Doc. 2018-02612 Filed: 2/9/2018 8:45 am; Publication Date: 2/12/2018]